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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,816

09/16/2003

Kim Torben-Walter

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MILES & STOCKBRIDGE PC  
1751 PINNACLE DRIVE  
SUITE 500  
MCLEAN, VA 22102-3833

EXAMINER

CHEN, BRET P

ART UNIT

PAPER NUMBER

1762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/18/2006

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/662,816

Applicant(s)

TORBEN-WALTER ET AL.

Examiner

B. Chen

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 10-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 1-33 are pending in this application, which is a CIP of 10/627914, now abandoned; which is a CON of 09/709560, now abandoned; which is a DIV of 09/223311, now US Patent 6,209,479.

### ***Election/Restrictions***

Applicant's election without traverse of claims 1-9 in the reply filed on 7/31/06 is acknowledged.

Claims 10-33 have been withdrawn from consideration as being directed to a nonelected invention.

### ***Specification***

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

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(4) if a mixture, its ingredients;

(5) **if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

It is noted that the claimed invention is directed to a method. The examiner suggests amending the abstract to reflect same.

The disclosure is objected to because of the following informalities listed below.

Appropriate correction is required.

On p.1 line 1 under Related Applications and Patents, the line should be filled in with the appropriate Serial Number.

On p.10 line 6, the applicant refers to Figure 6. At the present time, there is no Figure 6 in the Drawings.

### ***Claim Objections***

Claims 1, 4 are objected to because of the following informalities: the claims should end with periods. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lippert (3,386,182) in view of Brown (4,080,927).**

Lippert teaches a process of wetting powder with a liquid substance (column 3, lines 25-40). This liquid is supplied through annular ducts and is discharged into an atomizing stream (figure 5). It is the position of the examiner that this reads on producing an upward spray of coating fluid by means of a two-fluid nozzle. A perforated bottom plate is used to provide gas jets that are acentral and intersect the centerline of the spray (figure 1). As the powder spins in a circular motion around the bed, it is inherent that the powder would have an end-over-end movement as well. From the movement lines (6) of figure 1, it is shown that the jets guide the powder over the nozzle, thereby increasing the number of suspended bodies contacting the spray. The liquid is injected into a high velocity gas stream that breaks up the liquid (column 4, lines 1-5). This reads on providing an atomization gas to the two-fluid nozzle. A curved valve is used in the nozzle in order to reduce scattering effects (column 3, lines 49-65). The reference fails to teach pneumatically muffling the atomization gas just above the nozzle in order to reduce the scattering effects.

However, Brown teaches a fluidized bed where a swirl effect is imparted to the sprayed fluid by radially offsetting it in order to increase uniformity of circulation (column 6, lines 35-65). One skilled in the art would recognize that by radially offsetting the perforations closest to

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the two-fluid nozzle in Lippert, the spray just above the nozzle would have the swirling effect that is taught desirable by Brown. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to radially offset the perforations closest to the nozzle in the process taught by Lippert. By doing so, scattering effects are reduced. This radially offset gas stream reads on the muffling gas of the present invention, and therefore reads on claims 1-3.

With respect to the newly added limitation of “said bodies are pneumatically transported in said coating zone in a non-fluidized state”, it is the examiner’s position that Lippert teaches same. It is first noted that the applicant’s specification teaches that pneumatic transporting occurs by injecting air with enough velocity in the perforations in the bottom of the bed (p.3 lines 7-13 and p.13 line 23 – p.14 line 6). Lippert clearly teaches of injecting gas through the bottom plates (col.2 lines 1-22 and 55-72). It is the examiner’s position that Lippert teaches the claimed limitation.

As to claim 4, it would have further been obvious at the time the invention was made to a person having ordinary skill in the art that similar results would be achieved if the swirling effect were imparted by providing the radially offset gas though a mantel surrounding the two-fluid nozzle.

As to claims 6-8, Lippert fails to teach the number of bodies being wetted and the velocity of the gas being pumped through the perforations. However, the velocity of the gas would be dependent on the number of bodies and would affect the uniformity of the wetting. It would have been within the skill of one practicing in the art optimize these values in order to achieve maximum uniformity.

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**Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lippert (3,386,182) in view of Brown (4,080,927), as applied to claim 1 above, and further in view of Inaoka et al. (5,688,843).**

Lippert, in view of Brown, teaches the limitations of claim 1 above, fails to teach the maximum dimension of the powder particles. However, Inaoka teaches that "powders", as interpreted by those of ordinary skill in the art, may include particles with dimensions that are within the applicant's claimed range (column 29, lines 3-5). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use particles with dimensions taught by Inaoka in the process taught by Lippert, in view of Brown. By doing so, one would have a reasonable expectation of success, as Lippert teaches to use powders and Inaoka teaches particle dimensions that constitute being a powder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Chen whose telephone number is (571) 272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bc  
12/13/06

  
BRET CHEN  
PRIMARY EXAMINER